

TWIN CITY ATARI INTEREST GROUP NEWSLETTER

OCTOBER 1983

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President: Phil Seifert (448-7042)
Secretary: Rick Christian

Vice President: Dale Panton
Treasurer: Jim Dahlberg

Phil gavelled the meeting to order at 7:10 PM. Where did he get that gavel from, my ears were still ringing at the end of the meeting. Phil introduced the officers, his honor - the Prez himself - Phil Seifert, V.P. - Dale Panton, Treasurer - Jim Dahlberg, and the Secretary - Rick Christian.

Phil asked the question "Has anybody actually seen any ATARI 600's in any outlets (stores, or dealers) yet?" One member said that he had seen one at LaBelle's.

The Koala Pad is finally out, and everybody that has seen it has been raving about it. There will be a demo on it after the meeting tonight.

The latest news on the club's BBS is that it is up & running. Some of the problems that the BBS has been having have been caused by some ill-mannered people crashing the system by dumping lewd-language garbage files to the system. Dave Hanson showed the club one of the milder files. This type of behavior will not be tolerated when the new BBS comes on line sometime this next month. On the new BBS, you will have to have a registered password; which you can get by sending a 3X5 card with your name, address & phone number to Phil Seifert or by calling Greg Howell at 633-0735; in order to log on to the system. All violators will be strongly dealt with.

Speaking of the new BBS, it will be moving to the back room of Wizard Work some time in October. The new phone number will be 544-9058.

Phil asked about the possibility of the club purchasing a doubler for the BBS Percom drives and also, sometime in the future, getting a printer for the BBS for logging purposes. It was brought up that the BBS users, e.g. people with modems that use the BBS and want a password, should support the BBS and bear most of the cost of buying the doubler and printer. It was decided by a vote of 36 to 3 (of the people with modems that were present) that the club will charge a one time fee of \$5.00 for a password to get on to new BBS.

Treasurer Jim Dahlberg said that the club has about \$800.00 in our account at the present time.

Phil introduced a visitor from Des Moines, Iowa, John Beck, president of the Magic Group there, who gave us the phone number of the Magic BBS 515-961-881. Spartan Software will soon have a BBS of their own up soon also.

LJK has a new program to go along with Letter Perfect called Spell Perfect that will correct your spelling errors for you.

Tom Moore the membership chairman put our current membership at about 380 members.

From Wayne Vassal, club librarian, the listing for both last month's and this month's disk of the month made it into the newsletter this month.

Phil asked about sending out a new, updated membership list to all members. A sign up sheet was put out for those who do not wish their name to be on that list.

Mike Davis - Music SIG now has two disks for sale, Volume I Music disk - double sided for \$6.00, and an A.M.S. Demo disk with more music on it for \$4.00. Mike also needs some volunteers that have A.M.S. to input Christmas music for a music disk for November. Please note that anyone that volunteers will get a free copy of the completed disk. Mike also said that he may hold a tutorial soon on A.M.S.

Anyone interested in getting together to put in programs from "Compute" should get in touch with Don Robinson.

There will be a swap meet before the meeting in October at 5:00 P.M.

Phil asked about starting up a cp/m sub-group, so if you're interested in running cp/m on your ATARI via an ATR8000 or whatever, see Phil.

Bill Nordstrum of the Education SIG asked for a volunteer to take over the Ed. SIG and Tim Hurley volunteered, thanks Tim. Bill also said that Antic Magazine had high praise for the new Atari LOGO Program, but it's not out yet (sound familiar -secretarial comment).

There was also a sign-up sheet for team programming. What that is, is a team of people that get together and write a program as a team. If you're interested, there will be a sign-up sheet at the October meeting also.

And last but not least, our Newsletter Editor, Todd Burkey, still needs more articles for the newsletter. Remember, if you donate an article for the newsletter, you get a free disk, or cassette of the month.

PROGRAM LIBRARY

By Wayne Vasel

HERE IS THE LISTING FOR THE PROGRAMS ON THE OCT. DISK OF THE MONTH.

DRAW	- PROGRAM BY JOHN SKELLY
STARWARP	- SPACE, THE FINAL FRONTIER
MULTIPLY	- GOOD MATH PROGRAM
EAR	- SCIENCE REVIEW
DESIGN	- RANDOM GRAPHICS PATTERNS
CRAPS	- WATCH OUT FOR SNAKE EYES
INVASION	- ANOTHER INVADERS GAME
TREASURE	- WHERE IS CAPT. KIDD?
DICEROLL	- NICE DICE GRAPHICS
PLOTAL	- POLAR FUNCTION GRAPHICS
CUBE	- PLEASANT DESIGN PROGRAM
STORIES	- WRITE YOUR OWN STORIES
BLASTER	- NEAT GAME

SEE YOU AT THE MEETING.

NIBBLES AND BITS BY MD

No this isn't a dog food commercial. (nibbles and bits, nibbles and bits, I'm going to get some nibbles and bits). Most everyone knows what a bit is, the 1/8th of a byte. But the nibble may be a little obscure to those not used to manipulating bytes in assembly code.

What a nibble is then is 1/2 a byte, or the upper or lower 4 bits of a byte. We know that a bit is worth 1, and a byte is worth 255 (for those who think of a byte as being good for 256, try POKE 1536,256). Although you can POKE a byte with 0-255, or a total of 256 values, never forget that the value of 0 is 0, and 0 is good for nothing. A profound difference exists between 0 and all other numbers, a fact often neglected by some software designers, who allow 0 to be something more than nothing! If you DIM A(2), what you get is 3 places to save a number- A(1), A(2), and A(0)!

But try DIM A\$(2). No A\$(0) here! You only get 2 places! Confused? So were the people who wrote ATARI DOS. There are 720 sectors on a disk, but with DOS you only get 719 of them. The left hand of the DOS writer thought that sectors should be numbered 0-719 for a full 720 sectors. But then the right hand thought that 1-720 was the way to go. Between them we got short changed.

The point of course is that there are times when the dictates of logic fall victim to arbitrary assignment, and I mention it in an effort to make the newsletter larger since, as of the writing of this article, there are only two articles in.

Back to nibbles! A nibble then is worth 15, or two nibbles = $(15*16)+15 = 255$. So what?

So say you're writing a program and really running short of memory. You also need to store a whole "bunch" of numbers, but fortunately the numbers are all 0-15 inclusive. Store them in an array and each number takes 6 bytes! Well you are no dummie, so you decide to store them in a string as ASCII characters. Good, you now need only 1 byte per number! But, as fate would have it, you find that you still run out of memory.

But all is not lost! Since the numbers are all 0-15, each can be stored in a nibble rather than a byte, thereby halving the amount of memory required to store them and saving the day for the program. How is this done? If the program was being written in assembly language it would be fairly simple to use AND's to mask the nibbles and shifts to move the nibbles around in the byte. But let's say you only know BASIC and AND's, masks and shifts have more to do with grammar, halloween and transmissions than anything else you know about.

Here is what you can do then to get at those nibbles in BASIC.

N1 = first number 0-15

N2 = second " "

T = number to be PEEKed or POKEd

To PUT two nibbles into a byte;

T=N1*16+N2:POKE T,wherever

To GET the two nibbles;

T=PEEK(whatever): N1=INT(T/16):N2=T-N1*16

If you are curious as to what is going on with these two little subroutines, study the powers of 2 nature of binary numbers, where each bit of an 8 bit byte is;

128 64 32 16 8 4 2 1

all of which add up to 255!

ATARI MUSIC by Mike Davis

This article will explain some elementary music theory in relation to Advanced Music System usage. The assumption is made that the user's manual has been read, although not completely understood due to a lack of music theory knowledge.

The best place to start is in the "Enter/Edit Music" mode. Starting with the bottom part of the screen, you see (Note [Oct][Dur][Tie][Dot][Dyn]?).

Starting with "Note [Oct]", we need to refer to figure #1 which shows the complete range of A.M.S. The note has to be a single letter between "A" to "G" or "R". The lowest note possible is C1; the highest note is F6. The number to the right of the letter is the "[Oct]" (octave) range. Starting with any "C" and continuing upwards on the scale, the notes are D, E, F, G, A, and B followed by another "C". Usually the note that is exactly between the staves (middle C) is "C4" on A.M.S. By the way, "R" is for a rest.

Next in line is the "[Dur]" (Duration) input. In figure #2, an illustration of the different note lengths are made. Typical entries will be one letter.

W = Whole note
H = Half note
Q = Quarter note
E = Eighth note
S = Sixteenth note
T = Thirty-second note

If there happens to be one or two dots after the note, then you would put one or two periods after the "duration" letter. Another special case in duration are the triplets, quintuplets, and septuplets. Figure #3 shows what they look like. Three triplet notes take the same amount of time as two regular notes. Five quintuplets or seven septuplets take the same time as four regular notes. Take note that the number 3, 5, or 7 is always above the note group when this special duration is warranted. Without the number, the notes are treated

singularly. For example in figure #3, the triplet would be entered as the following.

D3S3
E3S3

F3S3

If the number three was not there then the entry would be:

D3S
E3S
F3S

Now pick out some simple music and just concentrate on voice 1. In order to play back when you are in the "Enter/Edit" mode, press "Q". This will get you back to the main menu. Now press "A" then "L". This will have voice 1 playing by itself.

Next month, we shall continue with more basics and a couple of lines of music will be provided for four-voice entry.

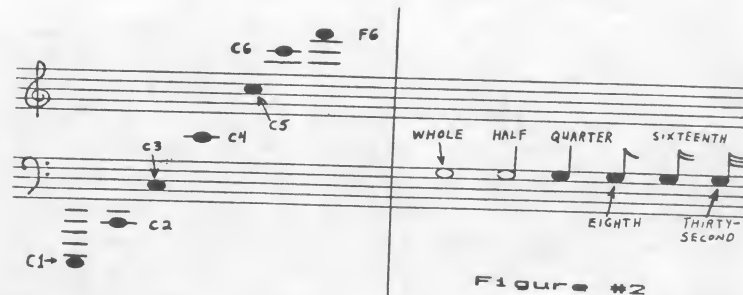


Figure #1



Figure #2



Figure #3

FROM THE EDITOR

BY TODD BURKEY

Well, everyone must have forgotten to submit their articles again. I don't have time to write much this month, so I guess we will have a short newsletter for once. I am writing part of this newsletter (my stuff) using Perfect Writer in my ATARI/ATR8000 configuration. The rest of the newsletter will be put together using ATARI WRITER. Perfect Writer has ATARI Writer beaten hands down, but I am too lazy to transfer the files over to the same operating system.

Mike Davis forgot to mention in his article that the MUSIC disk of the month is now available to everyone in the club. You don't need to own the AMS system anymore to buy the disks, because Mike obtained permission from the author of AMS to distribute an autoplay program that I wrote for the AMS system. These disks are fun to listen to and are an excellent way to show someone the features of ATARI sound. The AMS is also an excellent driver for and method of learning music.

HARDWARE/SOFTWARE UPDATE

BY TODD BURKEY

Good news from RANA finally. They got their chips in and started shipping their drives with double density installed the week of the 18th. I talked to a RANA rep and also found out that the drives will have a third density mode to remain compatible with the 1050's 128K 'density and a half' mode. I don't know why they bothered, since not too many people are going to be foolish enough to limit their programs to running only on the 1050. RANA will be sending a letter out to all owners of the first batch of drives describing how to get their drives upgraded at no charge. They indicated that they will probably accept the drives COD at the factory, so that they can re-align the heads. I will let you know more when I receive more info.

Austin Franklin 48K boards are no more! I talked to Mr. Franklin and he indicated that he was basically priced out of the market by the low pricing on the INTEC memory boards. This was a problem for me, since most people

I know won't touch INTEC hardware. All I can recommend is that you get some 32K adapter boards (bare) and get to 48K that way. Austin Franklin still makes the 80 column board and plans on extending his line of support to the 600XL by providing a memory expansion and I/O port kit for around \$150. This will include 48K more memory and supposedly serial and parallel interfaces. After looking at the technical skill he put into the 80 column board, I wouldn't be surprised if his 600 upgrade is better than what ATARI will come up with.

The ATR8000 is here to stay. At the last count, we now have 8 ATR owners in the club. Once everyone gets their drives in, we will probably have enough people to start our own ATR club. In fact, we will have to, just to figure out the most efficient way to get our hands on the large amount of public domain CP/M software in the country. One bulletin board I looked at had 20 Megabytes of public domain programs, languages, etc.

The 600XL is finally out...saw that Phil had one several weeks ago. It looks like the pictures that we have all seen, but the operating system is still that of the 1200 apparently, so some of my expectations weren't met. I was under the impression that a different OS was being developed.

I see that Target is still clearing out some of their ATARI hardware. ATARI 1025 printers are clearanced at \$199 (under dealer cost), so I expect that more of our club members will have less of an excuse for not submitting articles now.

In the world of software, I have seen or heard about the following being released:

- | | |
|-----------|--|
| Joust | Good graphics and sound. This game puts you on the back of a winged beast, playing aerial jousting with the computer and optionally another player. This is very close to its arcade counterpart in play and graphics. |
| Tennis | Pong has really come a long way. Not only do you have players like in ATARI basketball, but you get a good 3D effect of the ball going over the net. |
| Parallax | Remember Crossfire? This game is less graphically inclined, but it can be addicting. |
| STAR TREK | Supposed to be much like the recent arcade version. |

STAR WARS No, this isn't out yet for the ATARI. It is an excellent arcade game produced by ATARI that utilizes 3 computers to handle detailed 3D graphics. It is definitely worth 50 cents to try it out.

ERATA
BY R. RYE

Item for possible discussion at the next meeting:

Proposed that TAIG buy at least one share of Warner stock.

Proposed that TAIG suggest to other clubs and interested parties to do the same.

Proposed that TAIG and other shareholders write to WARNER and show support for ATARI.

The current stock price is around \$25 (plus about \$30 commission). By buying a stock TAIG will be on the stockholder list and receive current information on plans for ATARI. By being a stockholder TAIG will also have a voice (be it a small one) in those plans for ATARI.

The following books are in the MNPLS Public Library:

Your Atari Computer by Lon Poole (1982)

Atari Sound and Graphics by Herb Moore (1982)

Programming Your Atari Computer by M. Thompson (1983)

Atari Programming with 55 programs by L. Schreiber (1982)

Kids and the Atari by E. Carlson (1983)



HARDWARE

LIGHT PEN with software.....\$30

NUMERIC KEYPAD H plugs into joystick port.....\$25

NUMERIC KEYPAD N no handler required, must be installed.....\$35

AXIOM GRAPHICS printer.....\$260

SOFTWARE

HOME USER PACK, Addresser, Cardfile, Financier, Grapher I.....\$30

PROGRAMMER PACK useful programming aids.....\$30

TYPEWRITER simple text processing,\$20

(612) 861-1893

TWIN CITY ATARI INTEREST GROUP MEMBERSHIP APPLICATION

Name: _____ Date: _____

Family members to be included: _____

Street: _____

City: _____ State: _____ ZIP: _____

Phone: (_____) _____

Membership dues are \$10/yr (single or family). Make your check payable to the Twin City ATARI Interest Group (TAIG).

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Tom & Ellen Moore, Membership Chairpersons
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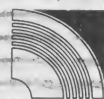
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Trak AT-D2 Doub/D		360.00

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TWINCITY ATARI INTEREST GROUP
6824 QUEEN AVE. S.
RICHFIELD, MN 55423



Next TAIG Meeting:

Sunday, October 30, 1983

SWAP MEET - 5:00

Tutorials (org.) - 6:00

TAIG - 7:00 P.M.

COMPUTE! Planning- afterwards

Odd Fellow's Lodge
3003 27th Ave. S.
Mpls, MN